BRING

TEXTBOOK!!!

Warmup 11/$\left(Solution\ of\ \frac{1}{7}x = 1\right)$

PAPER RETURNERS: RETURN ALL PAPERS! Then they can study the homework for the quiz! (You should be doing this every day!)

1. Create your own equation that has a solution of 5. Your equation should have variables on both sides.

2. Create your own equation that has a solution of ½.

ON THE BACK (AND in a different color):

- You must **redo** the ones you got wrong until you figure out how to get the right answer.

- If you got a 100% or when you have finished your corrections, you have permission to **float around and help people!** Take your worksheet with you so that you can help them better.

Equations Worksheet:
CHECK YOUR ANSWERS. Write the correct
answer in a different color if you got it wrong!

14) p = 7

15) p = -10

16) p = 8

17) p = $\frac{9}{8}$ or $1\frac{1}{8}$

18) g = 5

19) g = 50

20) g = -4

21) (check)

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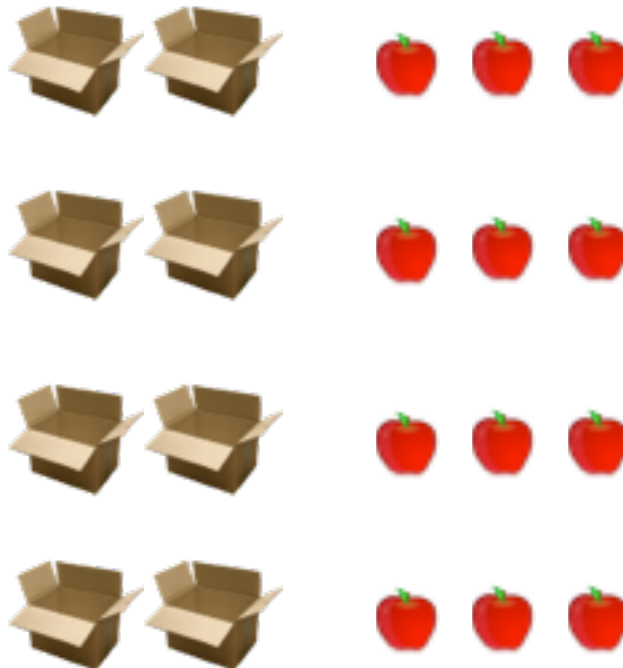
Equations with Distributive Property

Objective:

-Solve equations using the distributive property

A visual way to understand the distributive property:

4(2x + 3)

Q: How would I show it with boxes and apples?

COPY!!!

(4 groups. Each group has 2x + 3.)

Distributive Property

- Distribute:

$4(x-2)$ **$4x-8$**

$3(4x+1)$ **$12x+4$**

$-2(3a-4b+7)$ **$-6a+8b-14$**

For your notes:

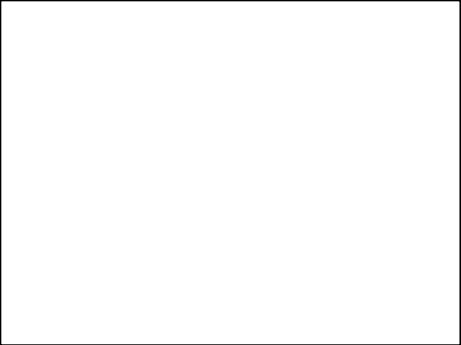## Distribute and combine like terms:

$-4(5a - 3) + 12a - 8$

$-20a + 12 + 12a - 8$

$-8a + 4$

$-4a$ ← BAD

$-8a + 4$

$-8a + 4$

4(2n + 3) = 20

- What does the **(2n + 3)** part have to equal???

From the pretest:

4(2n + 3) = 20

2 ways to solve:

$$\frac{4(2n + 3)}{4} = \frac{20}{4}$$

$$2n + 3 = 5$$

$$\underline{ -3 \quad -3}$$

$$2n \quad = 2$$

$$n = 1$$

$$4(2n + 3) = 20$$

$$8n + 12 = 20$$

$$\underline{-12 \quad -12}$$

$$8n \quad = 8$$

$$n = 1$$

For your notes:

6(3x – 2) = 24
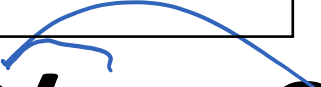
1. Solve by distributing first:

$$6(3x - 2) = 24$$
$$18x - 12 = 24$$
$$ + 12 \quad +12$$
$$\frac{18x}{18} = \frac{36}{18}$$

$$\boxed{x = 2}$$

2. Solve by dividing by 6 first:
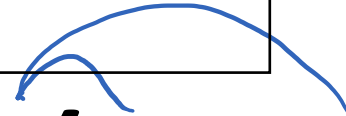
$$\frac{6(3x - 2)}{6} = \frac{24}{6}$$
$$3x - 2 = 4$$
$$ +2 \quad +2$$
$$\frac{3x}{3} = \frac{6}{3}$$

$$\boxed{x = 2}$$

Solve:

3(x + 8) = 18

$$3x + 24 = 18$$
$$-24 \quad -24$$
$$\frac{3x}{3} = \frac{-6}{3}$$
$$\boxed{x = -2}$$

Solve:

-2(4x − 1) = 34

$$-8x + 2 = 34$$
$$ -2 -2$$

$$\frac{-8x}{-8} = \frac{32}{-8}$$

$$\boxed{x = -4}$$

Solve:

5(2x + 1) = 23

Solve:

3(x − 4) = x + 8

Solve:

$$15\left(\frac{2}{5}x + 1\right) = 6\left(\frac{2}{3}x + 5\right)$$

Solve:

10(3y − 2) − 20y = 70

Solve:

10 – 4(2x – 9) = 30

Solve:

$$-x + 8 = \frac{x}{5}$$

Homework

- p. 157 (1, 2, 3)